

## **US Army Corps of Engineers**. Philadelphia District

Wanamaker Building 100 Penn Square East Philadelphia, PA 19107-3390 ATTN: CENAP-OP-R

## **Public Notice**

Public Notice No.
CENAP-OP-R-2009-707

JUN 02 2009

Application No.

File No.

In Reply Refer to:

REGULATORY BRANCH

This District has received an application for a Department of the Army permit pursuant to Section 10 of the Rivers and Harbors Act of 1899 (33 U.S.C. 403) and Section 404 of the Clean Water Act (33 U.S.C. 1344).

The purpose of this notice is to solicit comments and recommendations from the public concerning issuance of a Department of the Army permit for the work described below.

APPLICANT: Aqua Pennsylvania

762 West Lancaster Avenue Bryn Mawr, PA 19010

AGENT: CET Engineering Services

1240 North Mountain Road Harrisburg, PA 17112

WATERWAY: Pickering Creek and Schuylkill River

LOCATION: The project site is located at the Pickering Water Treatment Facility on an unnamed island in the Schuylkill River near its confluence with Pickering Creek, in Schuylkill Township, Chester County, and Upper Providence Township, Montgomery County, Pennsylvania. The location is shown on the enclosed map E-1.

ACTIVITY: The project proposes to upgrade the existing raw water intakes, install a concrete retaining wall, and replace the existing pump station building with a building large enough to house four pumps. The proposed work is shown on the enclosed plans E-2 through E-6.

The two existing Schuylkill River raw water intakes will be upgraded by adding three new passive intake screens with an automatic cleaning system at the Pickering Water Treatment Facilities. Two passive intake screens will be attached directly to the ends of the existing intakes and a third screen will be attached to a common 36" diameter header that will connect the existing intakes. The passive intake screens are designed to reduce slot entrance velocity, which protects aquatic life by preventing debris from clogging the screens. The bar rack openings on the existing screens will be plated over as part of the project.

The intake screens will include a Hydroburst air system that flushes the debris away from the screen surface by releasing a large volume of compressed air inside the screen. The compressed

air is forced to the intake screens through air lines that are installed from a receiver tank, which will be located outside of the flood plain. The cleaning process is automated and will be controlled by timers and set to one cleaning per week per screen. During leaf season, cleaning may be increased to twice per week per screen. During the cleaning process, debris will be carried away by the river current. A separate 4" diameter air line connected to each screen will be installed across the Schuylkill River using directional drilling.

The river bed will be hydraulically dredged at the intakes to ensure that the required minimum clearance is provided at the bottom of the screens. A floating debris boom will be installed upstream of the intakes to help in deflecting large debris away from the submerged passive screens. A concrete intake channel will be constructed under the intake screens to help control the deposition of solids in the area. The intake channel will be cleaned in two ways. A bubbler pipe will provide a continual stream of air to the channel to keep solids from settling. A submersible pump will be installed in the existing junction box and an 8" line will be installed to provide backwash water to the intake channel. The backwash water, which will be pumped from the river by the facility's raw water pumps, will be pumped periodically to the intake channel to flush any debris which might have settled in the bottom of the intake channel.

A concrete retaining wall (1.5' wide) will be constructed between the two existing concrete intake structures. The area behind the wall will be backfilled with approximately 200 cubic yards of stone, a combination of PennDOT 2A modified stone and AASHTO No. 3 stone. The area between the two existing intake structures is approximately 40' long, 13.5' wide, and 11' deep at the deepest location (9' below the Ordinary High Water Mark elevation). Portable dams will be used to isolate the work area and the construction of the retaining will be be conducted in the dry. The installation of the retaining wall will result in smooth stream flow past the intakes, reducing eddy currents that allow debris to accumulate near the existing intakes. A temporary causeway will be constructed across a portion of the Schuylkill River from the Chester County side to the south side of the island for equipment access.

All in-stream work is to take place between April 15 and October 1 of any given year for the protection of red-bellied turtles.

The Pennsylvania Department of Environmental Protection Permit Number E15-190 was amended on March 11, 2009, to allow for the work proposed above.

PURPOSE: The purpose of the proposed project is to improve water treatment plant operation and reliability, to improve worker safety, and to help ensure that blockages at the raw water intakes do not restrict water supply to the plants. The existing water intakes are not accessible during flood events or moderately high flows on the river. The raw water pumping rate must be reduced during periods of high debris accumulation until the debris is cleaning. The system proposed will reduce debris accumulation and provide an automated process that will reduce hazards to workers by reducing the need for manual cleaning of the screens.

A preliminary review of this application indicates that the proposed work would not affect listed species or their critical habitat pursuant to Section 7 of the Endangered Species Act as amended. As the evaluation of this application continues, additional information may become available which could modify this preliminary determination.

The decision whether to issue a permit will be based on an evaluation of the activity's probable impact including its cumulative impacts on the public interest. The decision will reflect the national concern for both protection and utilization of important resources. The benefits which reasonably may be expected to accrue from the work must be balanced against its reasonably foreseeable detriments. All factors which may be relevant to the work will be considered including the cumulative effects thereof; among those are conservation, economics, aesthetics, general environmental concerns, wetlands, cultural values, fish and wildlife values, flood hazards, flood plain values, land use, navigation, shore erosion and accretion, recreation, water supply and conservation, water quality, energy needs, safety, food and fiber production, mineral needs and welfare of the people. A Department of the Army permit will be granted unless the District Engineer determines that it would be contrary to the public interest.

The Corps of Engineers is soliciting comments from the public; Federal, State, and local agencies and officials; Indian Tribes; and other interested parties in order to consider and evaluate the impacts of this proposed activity. Any comments received will be considered by the Corps of Engineers to determine whether to issue, modify, condition or deny a permit for this proposal. To make this decision, comments are used to assess impacts on endangered species, historic properties, water quality, general environmental effects, and the other public interest factors listed above. Comments are used in the preparation of an Environmental Assessment and/or an Environmental Impact Statement pursuant to the National Environmental Policy Act. Comments are also used to determine the need for a public hearing and to determine the overall public interest of the proposed activity.

Comments on the proposed work should be submitted, in writing, within 15 days to the District Engineer, U.S. Army Corps of Engineers, Philadelphia District, Wanamaker Building, 100 Penn Square East, Philadelphia, Pennsylvania 19107-3390.

Review of the National Register of Historic Places indicates that no registered properties or properties listed as eligible for inclusion therein are located within the permit area of the work. In a letter dated July 9, 2008, the Pennsylvania Historic and Museum Commission indicated that there is a high probability that prehistoric and historic archaeological resources are located in the project area. However, the activity described should have no effect on such resources. Should the scope of the project be amended to include additional ground disturbing activities, a Phase I archaeological survey may be necessary to locate all potentially significant archaeological resources.

The Magnuson-Stevens Fishery Conservation and Management Act, as amended by the Sustainable Fisheries Act 1996 (Public Law 104-267), requires all Federal agencies to consult with the National Marine Fisheries Service on all actions, or proposed actions, permitted, funded, or undertaken by the agency that may adversely effect Essential Fish Habitat (EFH). A preliminary assessment of the species listed in the "Guide to Essential Fish Habitat Designations in the Northeastern United States, Volume IV: New Jersey and Delaware", dated March 1999, indicates that no Essential Fish Habitat is located within the project site.

In accordance with Section 307(c) of the Coastal Zone Management Act of 1972, applicants for Federal Licenses or Permits to conduct an activity affecting land or water uses in a State's coastal zone must provide certification that the activity complies with the State's Coastal Zone Management Program. The applicant has stated that the proposed activity complies with

and will be conducted in a manner that is consistent with the approved State Coastal Zone Management (CZM) Program. No permit will be issued until the State has concurred with the applicant's certification or has waived its right to do so. Comments concerning the impact of the proposed and/or existing activity on the State's coastal zone should be sent to this office, with a copy to the State's Office of Coastal Zone Management.

In accordance with Section 401 of the Clean Water Act, a Water Quality Certificate is necessary from the State government in which the work is located. Any comments concerning the work described above which relate to Water Quality considerations should be sent to this office with a copy to the State.

The evaluation of the impact of the work described above on the public interest will include application of the guidelines promulgated by the Administrator, U.S. Environmental Protection Agency, under authority of Section 404(b) of the Clean Water Act.

Any person may request, in writing, to the District Engineer, within the comment period specified in this notice, that a public hearing be held to consider this application. Requests for a public hearing shall state in writing, with particularity, the reasons for holding a public hearing.

Additional information concerning this permit application may be obtained by calling Brenda Wasler at (215) 656-5866 between the hours of 1:00 and 3:30 p.m. or writing this office at the above address.

Frank J. Cianframi

Chief, Regulatory Branch











